

GET TO KNOW

Western rattlesnakes



What to expect from this educational packet

This worksheet will teach you more about western rattlesnakes and the important roles they play in our ecosystems! Through this packet, you will:

- Learn about the lives of western rattlesnakes, including their habitat, diet, and special adaptations
- Explore Indigenous cultural connections and oral histories related to rattlesnakes
- Do some fun activities, including drawing, a crossword, and word search
- Reflect on what you've learned with our discussion questions

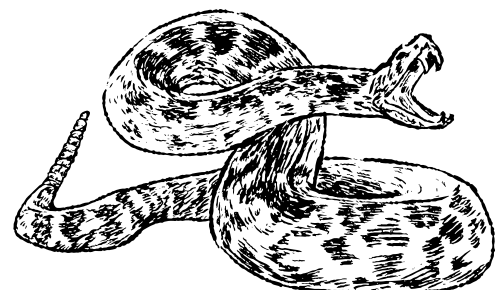
Introduction

Western rattlesnakes (*Crotalus oreganus*) are fascinating reptiles native to North America, and they hold a special place in British Columbia's ecosystems. In fact, they're one of only three rattlesnake species found in Canada, and the only one still living here today. The subspecies found in B.C. is the Northern Pacific rattlesnake (*Crotalus oreganus oreganus*), which spends its active months from April to October hunting, basking, and navigating its rugged habitat before hibernating through the winter.

Despite their important role in nature, Western rattlesnakes face serious challenges. Habitat loss and fragmentation, collisions with vehicles, and fear-driven persecution by humans all threaten their survival. Learning more about these misunderstood snakes can help us appreciate their ecological value and support efforts to protect them in the wild.

What do you know about Western rattlesnakes?

Write down some facts you know about this species, and come back at the end of the worksheet to see what you can add!



All about rattlesnakes



What are Western rattlesnakes?

Western rattlesnakes are a species of venomous snake found in North America. In Canada, only one subspecies lives here—the Northern Pacific rattlesnake—and it's found exclusively in British Columbia. These snakes are known for the rattle at the end of their tails, which they use to warn predators to stay away.



Where do Western rattlesnakes live?

Western rattlesnakes live in the dry valleys of southern British Columbia, which is the northernmost part of their range. They prefer rocky areas in forests and grasslands, and spend the winter hibernating in underground dens, often with other snakes. During warmer months, they travel up to 3 km to find food and mates before returning to their dens in the fall.



What do they eat?

Western rattlesnakes mostly eat small mammals like mice, voles, shrews, squirrels, and sometimes birds. They are passive predators, meaning they wait quietly for prey to come close. Then, they use heat-sensing pits to detect movement and strike quickly. When they bite their prey, they inject venom into it to help with digestion before swallowing it whole.



What gifts do they have?

Western rattlesnakes have some amazing adaptations! Their heat-sensing pits help them find warm-blooded prey, even in the dark. Their venom not only helps them catch food but also starts the digestion process. And of course, their famous rattle warns others to stay away, helping them avoid danger without having to fight.

Nature's thermometers: Western rattlesnakes as ecosystem indicators

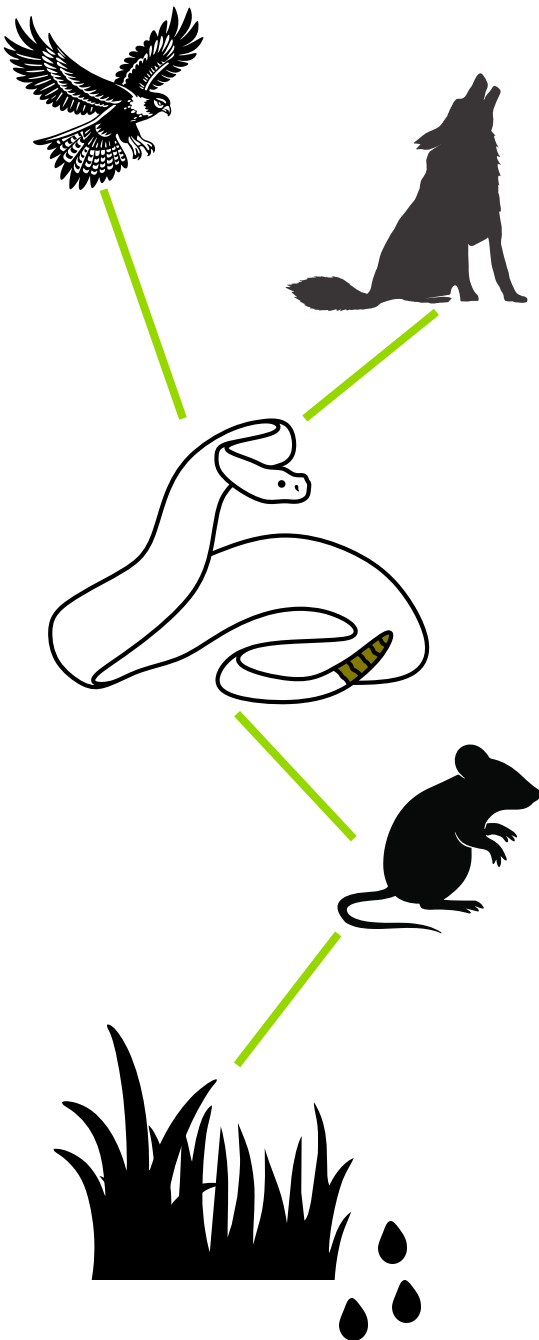
What can snakes tell us about the health of the environment?

Western rattlesnakes are more than just fascinating reptiles — they're powerful indicators of ecosystem health. Because they rely on stable habitats and a variety of prey species, changes in their population can signal broader environmental shifts. They are ectotherms, meaning they depend on external temperatures to regulate their body heat. This makes snakes especially sensitive to climate change. Warmer conditions can extend their active seasons, allowing more time for hunting and reproduction. However, these changes can also disrupt food webs and increase competition for resources.

Their role as mid-level predators helps keep rodent populations in check, preventing overgrazing and supporting plant health. At the same time, rattlesnakes serve as prey for larger animals like hawks, coyotes, and badgers, making them a vital link in the food chain. If Western rattlesnake populations decline, rodent numbers could surge, leading to habitat degradation and reduced biodiversity. Their presence — or absence — can reveal the health of the entire ecosystem.

Are rattlesnakes endangered?

In British Columbia, Western rattlesnakes are officially listed as Threatened under Canada's Species at Risk Act and are Blue-listed provincially. This means they are vulnerable to population decline due to their limited range and ongoing threats like habitat loss, road mortality, and human persecution. Their slow reproductive rate and strong loyalty to traditional dens make population recovery difficult, emphasizing the importance of conservation efforts.



Exploring Indigenous cultural connections

When we learn about western rattlesnakes and their role in ecosystems, it's also important to understand how humans have cared for the land for countless generations. Indigenous stewardship has long recognized the interconnectedness of all beings, and these teachings offer valuable insights into how we relate to animals like rattlesnakes.

Indigenous stewardship has adapted in many ways with increased climate impacts across the landscape. Sierra Club BC aims to honour Indigenous voices and to ensure that unique Nations and worldviews are respectfully acknowledged. While we've shared some publicly available resources below as a starting point, it's best to engage with local Indigenous communities.

Each Indigenous Nation has distinct perspectives, cultures, and governance systems. This means that different communities will have different relationships with rattlesnakes and their habitats. Many Nations have websites with publicly shared knowledge you can explore, or you could attend a public event hosted by the community. If you don't know whose territory you live on, you can visit Native-Land.ca to learn more.



This next section includes website links for deeper learning. To explore these resources, please visit sierraclub.bc.ca/rattlesnake-resource



Teachings from the land

In one oral history shared by the Secwépemc Nation, a rattlesnake was thrown west during a battle between two giant transformer brothers, marking the beginning of rattlesnake habitat near Kamloops, B.C. This story, passed down through generations, helps define the ecological boundary of rattlesnake territory and shows how oral traditions can guide our understanding of the land and its creatures. Members of the Osoyoos Indian Band have also worked to protect Western rattlesnakes and promote positive messaging about them. Their efforts reflect a deep respect for the species and its role in the local desert-like ecosystems of the Okanagan Valley.

Learn how to say rattlesnake in your local First Nation's language

We invite you to learn more about rattlesnakes from the Indigenous community on whose territory you live. Visit FirstVoices.com to explore words, songs, and stories from different First Nations. With this link, you can also learn how to say "rattlesnake" in the language of the Indigenous community on whose territory you live.

Activities

Draw a rattlesnake!

Watch a tutorial
on how to draw
rattlesnakes!



With this activity, we encourage you to draw rattlesnakes and their habitat. If you'd like a tutorial, you can watch our *Learn to Draw Rattlesnake* lesson with the QR code above or visit sierraclub.bc.ca/draw.

Rattle-tastic Adaptations

Introduction:

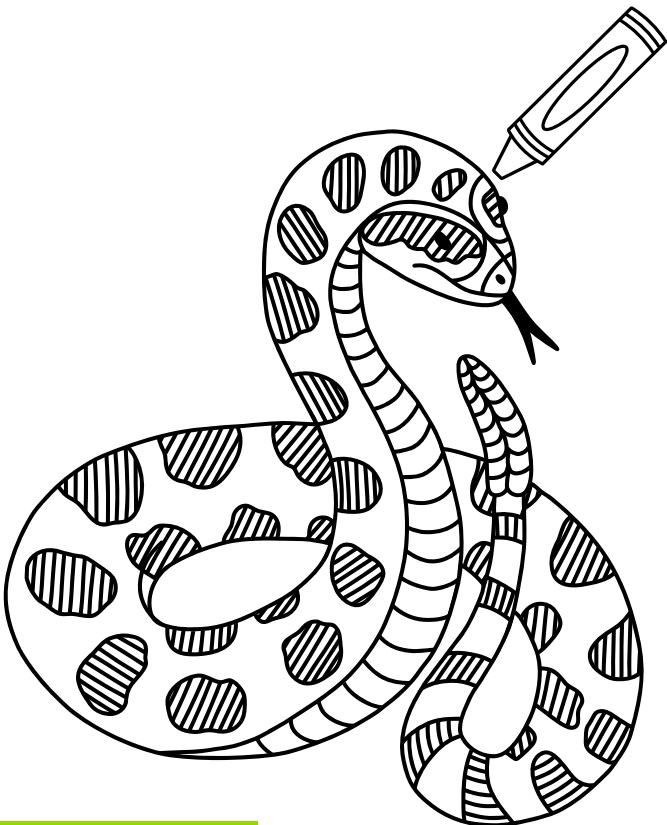
Western rattlesnakes are the only rattlesnake found in B.C.! These snakes live in dry, rocky areas and use their heat-sensing pits, venom, and famous rattle to survive. Their rattle warns others to stay away, helping the snake to stay safe without fighting!

For this activity you will need:

1. 5-10 toilet paper rolls
2. Scissors
3. Markers or crayons
4. Tape or glue
5. A few dry beans, rice, or small beads
6. A stapler (optional)

Instructions:

1. Start by cutting each of the toilet paper rolls in half to create two smaller tubes. Set one tube aside to become your 'rattle'.
2. Take each of the remaining toilet paper rolls and line them up so they fit together. Then, tape or staple the edges together so that you create one long tube that can bend. This will be your snake's body!
3. Make the rattle: Fill one tube segment with beans, rice or small beads. You don't have to use that many because you want to give it space to shake around.
4. Close each side of the rattle tube either with tape or a stapler, so the beans/rice/beads don't fall out.
5. Attach the rattle to your snake's tail.
6. Decorate your snake with rattlesnake patterns — diamonds, zigzags, or spots!
7. Shake it gently to hear your snake "warn" others — just like a real Western rattlesnake!



Western Rattlesnake

WORD SEARCH

A Y E A V I J P W G F G W J N P E C W R K U Y U D M V B F V
J M S D Z C N P N M G H B E N E N C E S B M M W O R H C J X
U L I A P W J R S Q S I W K M X D W N W I V N F K S V K S J
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S J O T N X R L S J Z Y E N U S S D H A A P R E D A T O R V
R D Y S S Z T C K Z S R C D A B G I U S M C D Q A A Y K Q J
C O I F Q E C P K V O P Z G C Z C U J K R U T O A D E G J X
B F C F W I N X F T F O A J O K Z K V D A A O L K U P Y O I
M G N K A Q H S E B B X X H N Y F D Z R T G L I E B Y A C W
J Y I I Y H H C I R L X E O S K C O F I T X A K L C M I I L
R H N H D S I E G N F S U S E A A I R N L F D E Y F G S P R
M E A S E H X P W F G L Z P R B M F V D E S C S F K K R X N
L C T B N U L Y N R C S M Q V W O X N I S I E Y O E U M K K
G I C J I Z Z T E R J C K F A N U D V C N G A D D R B K T X
R R V Z O T S J G J M Q N E T X F T W A A A W Q P M G T X G
A C S Y R G A S Y O B X P W I U L Y T T K I P O A J T H H N
S C A S W I Z T D F T M E K O D A M K O E Z S S W X K H D U
S D Z D Q U P A Y D Z E C H N O G K M R B A L C B B D I E N
L L R K F O X B J P P C I N V G E P S I O T A S L P G B M R
A G E G C K E Z T O J T N V C O S M X W N M U S L P Z E S O
N K G W U M R Q R N O O R X L A D Y B A O P N S Q A M R X D
D Z W P V P Q S W P A T K D D B G U O R T K Q V V N L N E E
S O A L Y G Y S I T V H W A Y G W N N F T P T I Y W R A W N
A X J R A A Q R Q I N E U Y F N F M B B D P P K H X A T B T
R F Z Y A R O I N C K R N K T A S P K O V W V R V S T I M S
X V W U B M R N M M V M P O N W H K M M H L Y V T D T O N K
D L A H Z X K P C U K M Z N M O Q H K Y O U O C M M L N H J
Q Y H Z G L Z M G H J S D B J Y V N W I B P G B F H E V F Z

Crotalus – The scientific name for rattlesnakes.

Oreganus – The species name of the Western rattlesnake.

Subspecies – A smaller group within a species, like the Northern Pacific rattlesnake.

Bask – What snakes do when they lie in the sun to warm up.

Nocturnal – An animal that is mostly active at night.

Strike – A fast movement snakes use to catch food.

Digest – What snakes do after eating to turn food into energy.

Migration – When snakes move between places during different seasons.

Blue-listed – A special label for animals that need help to survive.

Scales – The small, hard pieces that cover a snake's body.

Denning – When snakes gather in underground homes for winter.

Stewardship – Taking care of the land and animals, often practiced by Indigenous peoples.

Western Rattlesnake

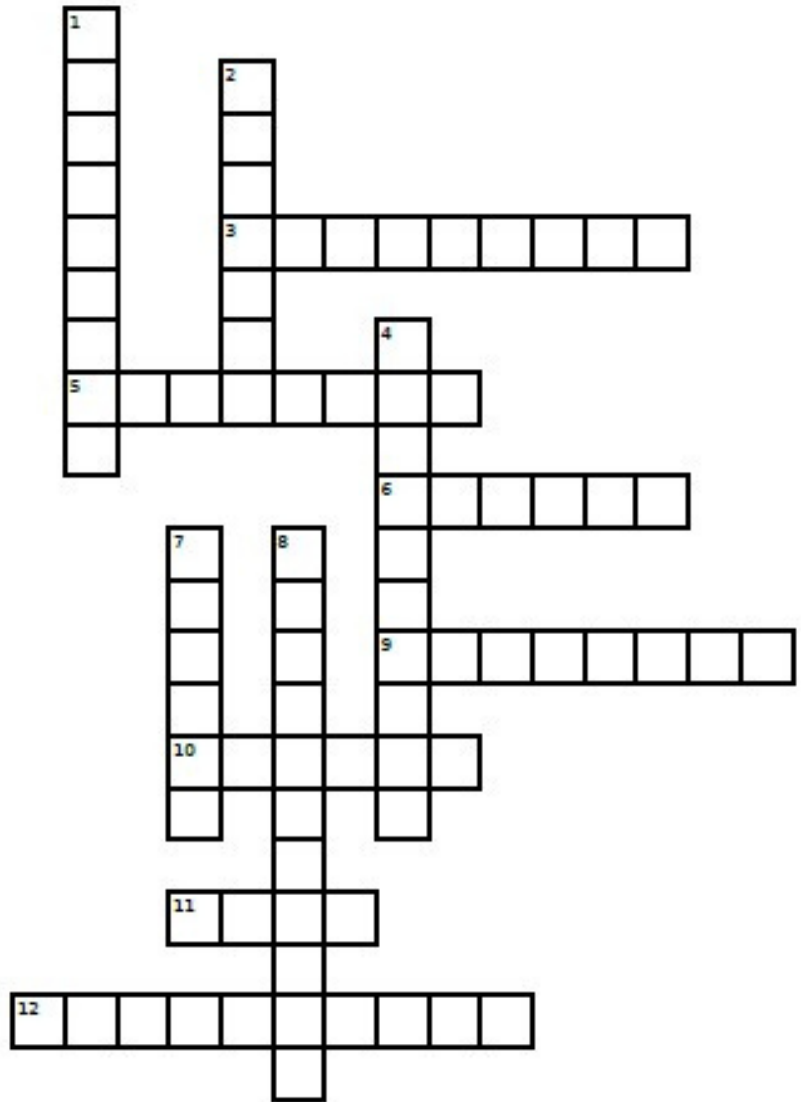
CROSSWORD PUZZLE

Across

3. An animal that is mostly active at night.
5. The species name of the Western rattlesnake.
6. A fast movement snakes use to catch food.
9. The scientific name for rattlesnakes.
10. The small, hard pieces that cover a snake's body.
11. What snakes do when they lie in the sun to warm up.
12. A special label for animals that need help to survive.

Down

1. When snakes move between places during different seasons.
2. When snakes gather in underground homes for winter.
4. A smaller group within a species, like the Northern Pacific rattlesnake.
7. What snakes do after eating to turn food into energy.
8. Taking care of the land and animals, often practiced by Indigenous peoples.



1. 1. Migration 2. Denning 3. Nocturnal 4. Subspecies 5. Oregonus 6. Strike 7. Digest 8. Stewardship 9. Crotalus 10. Scales 11. Bask. 12. Blue-listed

Discussion questions

Write down your thoughts and reflections to the questions below.

- What can we learn from the Western rattlesnake about patience, awareness, and balance in nature?
- How do you feel connected to the land and animals around you, including those we rarely see like snakes?
- What happens when fear leads us to harm animals like the rattlesnake, and how can we shift toward understanding?
- In what ways can we protect the homes of animals like the rattlesnake while also caring for our own communities?
- How do rattlesnakes help keep nature healthy, and what does that teach us about our own roles in the ecosystem?
- How can we be more mindful of the quiet signals in nature, like the rattle of a snake or the rustle of grass?

Keep learning with us!

We wanted to express our sincere gratitude to all those who helped breathe life into this work.

To explore our resource list and additional learning materials, we invite you to visit sierraclub.bc.ca/rattlesnake-resource.

